



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,980	03/27/2001	Herbert Lifka	NL 000157	9870

7590

06/19/2002

Corporate Patent Counsel  
U.S. Philips Corporation  
580 White Plains Road  
Tarrytown, NY 10591

EXAMINER
----------

PERRY, ANTHONY T

ART UNIT	PAPER NUMBER
----------	--------------

2879

DATE MAILED: 06/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/817,980

Applicant(s)

LIFKA ET AL.

Examiner

Anthony T Perry

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 1 and 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Specification***

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
  - (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
  - (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
  - (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or  
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
  - (e) BACKGROUND OF THE INVENTION.
    - (1) Field of the Invention.
    - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
  - (f) BRIEF SUMMARY OF THE INVENTION.
  - (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
  - (h) DETAILED DESCRIPTION OF THE INVENTION.
  - (i) CLAIM OR CLAIMS (commencing on a separate sheet).
  - (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
  - (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).
2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the

Art Unit: 2879

printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract is objected to because it is not at least 50 words and because it contains the use of the phrase "said."

### ***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: a in Fig. 6b and c in Fig. 6a and 6b. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 29. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 and 7, it is not clear what is meant by the phrase “viewed transversely to the substrate” (claim 1, line 3 and claim 7, line 3). The examiner has interpreted the statement to mean -viewed in the direction from the conductor pattern towards substrate-.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claims 1-5 rejected under 35 U.S.C. 102(b) as being anticipated by Morimoto et al. (4,542,317).

Regarding claim 1, Morimoto et al. discloses a display device in Fig. 6, comprising of a first substrate 11 provided with a conductor pattern 12 and 13, parts of which form pixels (P of Fig. 7), characterized in that, at least in the viewing area of the display device, the conductor pattern 12 and 13, viewed in the direction from the conductor pattern 12 and 13 towards the

Art Unit: 2879

substrate 11, substantially completely covers the corresponding part of the first substrate 11 (see 12 and P of Fig. 7). Part of the conductor pattern formed on the substrate is a metal film 12 (see col. 4, lines 11-12) represented by the slanted hash marks in Fig. 7. The part of the conductor pattern 13 that defines pixels is of transparent conductive material deposited in the openings P of Fig. 7 (see col. 4, lines 28-30). The paths S represent slits where the conductor pattern is not covering the substrate.

6. Regarding claim 2, Morimoto discloses a display device in Fig. 7 in which the parts of the conductor pattern, represented by the slanted hash marks are substantially mutually separated by partitioning paths S having a minimal path width.

7. Regarding claim 3, Morimoto discloses a display device in which the partitioning paths S have a substantially constant width (see Fig. 7).

8. Regarding claim 4, Morimoto discloses a display device in Fig. 7 in which the partitioning paths S have a curved course. Fig. 7 shows the partitioning paths S having a curved course where they surround the part of the metal film E, which surrounds the openings P.

9. Regarding claim 5, Morimoto teaches a display device in Fig. 7 in which 80% of the partitioning paths S have a minimal path width. As taught in the applicant's disclosure, minimal path widths are not achieved in places where the partition paths form a corner. More than 80% of partitioning paths S in Fig. 7 of the Morimoto reference have a straight or curved course (do not form corners in which a minimal path width is not achieved).

10. Claim 6 is rejected under 35 U.S.C. 102(e) as being anticipated by Young et al. (6,153,254).

Regarding claim 6, the Young reference teaches of a display device in Figs. 1, 2a, and 2b that comprises a light-emitting material 7 between two conductor patterns 8 and 2, at least one of which, viewed in the direction from the conductor pattern 2 towards the substrate 1, substantially completely covers the corresponding part of the first substrate 1. Fig. 1 shows the plan view of the display device where electrode strips 2 and 8 make up the two conductor patterns. Fig 2a and 2b show cross section views taken on the lines A-A and B-B respectively. Young discloses an electroluminescent display screen in which a flat substrate 1 is provided with a first pattern of conductors 2, then the first conductor pattern 2 is provided with an organic electroluminescent material 7 and then a second conductor pattern 8 (col. 1, lines 1-6). At the location where the electrode patterns 2 and 8 cross each other, pixels are formed which emit light (col. 1, lines 18-19).

11. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Khan et al. (6,034,752).

Regarding claim 7, the Khan reference teaches a display device in Fig. 6 that comprises a layer of electro-optical material 52 (chiral nematic liquid crystal) between two conductor patterns 56 on a first and second substrate 46 and 48 (see col. 11, lines 15-17), at least one of which conductor patterns 56, viewed in the direction from the conductor pattern 56 towards the substrate 48, substantially completely covers the corresponding substrate 48. The first substrate 46 has a conductive pattern 56 coated on the side facing the second substrate (see Fig. 6 and col. 11, lines 45-47). The second substrate 48 is provided a conductive layer 56 (see col. 11, lines 41-43) preferably comprised of Indium Tin Oxide (ITO) (col. 11, lines 61-62). A photoresist pattern is developed, baked and then placed in an acid bath to etch away unwanted regions of the

Art Unit: 2879

ITO and create an electrode pattern (conductive pattern) 56 which defines pixels (see col. 15, lines 45-46) on the second substrate 48 (see col. 13, lines 32-35). The conductor pattern is made up of elongated electrode strips each having a width of about 244 microns and a space between them of about 15 microns. Therefore it is clear that the formed conductor pattern 56 substantially completely covers the corresponding substrate 48.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Omae et al. (5,963,283) and Van Berkel et al. (6,118,584).

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Anthony Perry* whose telephone number is (703) 305-1799. The examiner can normally be reached between the hours of 9:00AM to 5:30PM Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (703) 305-4794. The fax phone number for this Group is (703) 308-7382.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [Anthony.perry@uspto.gov].

*All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly*



Art Unit: 2879

*set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.*

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



Anthony Perry  
Patent Examiner  
Art Unit 2879  
June 7, 2002



VIP PATEL  
PRIMARY EXAMINER